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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/779,668  | 02/18/2004  | Ryu Yokoyama         | 2001P078308 DIV2    | 8526             |
| 21254   | 7590        | 06/08/2004           | EXAMINER            |                  |
| MCGINN & GIBB, PLLC<br>8321 OLD COURTHOUSE ROAD<br>SUITE 200<br>VIENNA, VA 22182-3817 |             |                      | KIM, ELLEN E        |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2874                |                  |

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/779,668

Applicant(s)

YOKOYAMA ET AL.

Examiner

Ellen Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5,9-11 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,9-11 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/18/2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what has been claimed in the last paragraph. For example, the last two lines are repeating what already has been claimed in the last 5<sup>th</sup> lines to 3<sup>rd</sup> lines.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 5, 9-11, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneyama [USPAT 6,301,404] in view of Nakaya [USPAT 5,974,216].**

Yoneyama discloses a supervisory signal optical bypass circuit, optical amplifying repeater and supervisory system comprising optical transmission lines opposing each other [31a, 31b in fig. 16], amplifiers [34a, 34b]; wavelength selective reflecting means [32d, 32e, 33d, 33e], and optical attenuators [51a, 51b, 51c, 52a, 52b, 52c].

Yoneyama discloses all the claimed structure except for the variable attenuator.

Nakaya disclose an optical variable attenuator.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Yoneyama's device to include the variable attenuator as shown in Nakaya's reference for the purpose of minimizing polarization dependency [column 3, lines 49-52].

In re claims 15-17, Yoneyama shows in fig. 16 that gratings are disposed before and after the optical attenuator.

**Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneyama as applied to claims 1-11 above, and further in view of Delavaux [USPAT 5,392,153].**

Yoneyama discloses every aspect of claimed invention except for the optical isolator provided as an intermediate stage in each monitoring light signal folding-back line.

Delavaux discloses an optical amplifier and teaches at column 1, lines 36-54 that insertion of isolation between the amplifiers suppresses the backward traveling amplified spontaneous emission (ASE) and avoids degradation of the noise figure.

Therefore, It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Yoneyama's device to include the isolator in each monitoring light signal folding-back line for the purpose of suppression

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of the backward traveling amplified spontaneous emission (ASE) and preventing the degradation of the noise figure

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (571) 272-2349. The examiner can normally be reached on Monday and Friday.

Ellen E. Kim  
Primary Examiner  
May 25, 2004/EK

